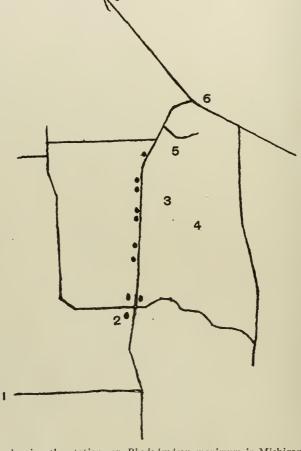
## THE HAUNTS OF RHODODENDRON MAXIMUM

BY STEWART H. BURNHAM

Saturday, November 19, 1904, was a very fine mild Indian Summer's day; smoky and hazy but too warm for comfort when climbing hills. The examination of the great laurel brought from Michigan Hollow swamp, a week ago, excited my curiosity and desire to find this shrub growing wild. *Rhododendron* 



Sketch showing the station or *Rhododendron maximum* in Michigan Hollow swamp. 1, West Danby; 2, School house; 3, Station for the great laurel; 4, Source of Michigan creek, flowing in a southerly direction: 5, a small pond, source of Tenmile creek, flowing in a northerly direction; 6, Danby; 7, To Ithaca, N. Y.

maximum L. is a rare plant in New York state: something like\* "a dozen reported stations . . . scattered from the Adirondacks to Chautauqua Co."; but it occurs quite abundantly on the Pocono plateau in Pennsylvania. However, according to Dr. C. H. Peck,† this showy shrub grows in great profusion about Barryville and in other places in Sullivan county.

The morning train on the Lehigh Valley railroad, from Ithaca was taken to West Danby, ten miles south of the city. It was with some hesitation that I started out in search of this rare shrub, being told that I would not find it, as other collectors had often failed.

Soon after leaving West Danby station, 872 feet above sea level, the ascending road follows the meanderings of a rocky rivulet. For some distance the woods are preserved on both sides of the road; although further east quite a territory had been cut over. It is a very pretty spot, the ground being covered with mosses and ferns, specially of the genera *Hypnum* and *Dryopteris*. *Hylocomium proliferum* (L.) Lindb. was abundant; and *Pogonatum brevicaule* (Brid.) P. Bv., on moist roadside banks. Up the hill, thickets were largely made up of sassafras, witch-hazel and hawthorn. A few unfruited plants of *Lycopodium clavatum* L., *L. complanatum flabelliforme* Fernald and *L. obscurum* L. were found; and as far as observation was made, neither of the first two clubmosses are as abundant in the Cayuga flora as in the Adirondack forests.

To where one enters the swampy woods it is about two miles from West Danby and one from Danby. The rail fence to be followed lies between two houses south and two houses north; with moderately large slate-colored barns standing on the east side of the road. The fence should be followed down to the "jog" in the woods; then one should go north a few paces, then directly east, a five minutes walk to the moister shades of the wood.

Michigan Hollow swamp covers several hundred acres, but in less than a quarter of an hour after entering the woods, the great laurel was found. The muddy bottom of partly desiccated

<sup>\*</sup> W. R. Dudley, The Cayuga Flora, 59. 1886.

<sup>†</sup> N. Y. State Mus. Rep. 47: 31. 1894 Bot. ed.

pools were covered with mats of golden saxifrage, Chrysosplenium americanum Schwein., swamp saxifrage, Micranthes pennsylvanica (L.) Haw, and the naked bishop's-cap, Mitella nuda L. There are quite large white pines and black ash, with much fallen timber and some underbrush in the immediate vicinity. On account of the coriaceous leaves, the great laurel, was easily seen in the leafless woods, but it might be readily passed by in midsummer.

The space covered by *Rhododendron maximum* L. near West Danby is within a circumference of six hundred feet, which is considerably larger than the area ascribed to it in the Cayuga Flora, *i. e.* "30 meters by 10." There were about seven distinct patches within the area: but one or two were slowly dying. In the wild state, as in Michigan Hollow, the shrubs have a tendency to form circular growths: and this is brought about by the reclining flexuous branches, taking root on becoming buried in the leaf mold and mud—nature performing the work of reproducing the plant by layering. The shrub attains no great height, on account of this natural process, although some of the central stems were at least fifteen feet high and an inch or two in diameter.

The bark on the older stems is rather close-flaky and grayish brown, higher up there is a tendency to exfoliate in light gray, thin plates; and in the leafy portion the young bark is reddish intermixed with gray patches. The wood is whitish and moderately hard. The evergreen leaves, clustered near and at the ends of the branches, are very thick, lance-oblong, about nine inches long including the reddish petiole, one to three inches wide, acute, narrowed at the base, bright green above, paler and smooth or sometimes rusty beneath, and the margin somewhat revolute. At this season, the crowded leaves assume a drooping position. Next season's flower buds were conspicuous, ovate in outline with foliaceous scales, and terminated the branches. Old seed capsules persisted on some of the branches.

The great laurel is slowly spreading and is in no danger of being exterminated, unless the wood choppers reach this portion of the swamp. Further south, in the swamp, some denudation has taken place. A few fungi were collected, and specimens of *Dryopteris Boottii* (Tuck.) Underw. and *D. intermedia* (Muhl.) A. Gray. One cannot but note the absence of the canoe and gray birches from the Cayuga flora, but the black and yellow birches are met with frequently. There are some fine yellow birches in this section. White, pitch and red pines occur; two fine trees of *Pinus resinosa* Ait., near the schoolhouse south of Danby, at the highest elevation of the road, 1,550 feet above sea level. Boughs of the red pine with cones attached were brought to the city for decorative purposes, and during the evening the cones gradually opened with a noticeable sound.

I climbed the high hill, southeast of West Danby station, 1,577 feet above the sea, in the late afternoon. The sides of the hill had suffered from a forest fire, probably during 1903, and but little timber was left. In the soil were many small flat stones, and near the pine clad summit were thickets of New Jersey tea, Ceanothus americanus L. and dockmackie, Viburnum acerifolium L. The haze so filled the valley that but little of the landscape could be seen, but the rolling hills, enshrouded as they were, added to the picturesqueness of the scene. On descending, the fruit of deerberry, Polycodium stamineum (L.) Greene, fallen to the ground, was found, in general appearance, reminding one of large green service-berries.

The following Monday, I consulted with Mr. Robert Shore, head gardener at the University, about starting the great laurel. He said the best method is by layering, when attached to the shrub, or by rooting the young growth to which a heel (node of older growth) is attached. The latter method was the only one opened to me, and after cutting away three fourths of the leaf, the cuttings were put in the greenhouse. However, I was unsuccessful, as all the cuttings finally died.

HUDSON FALLS, NEW YORK

## SHORTER NOTES

TILIA EUROPAEA IN OREGON.—Dr. Gleason's interesting note on *Rhamnus dahurica* in Michigan calls forcibly to mind a similar